Message

From: Richard, Ann [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=8980B96D55AE4A268DB3CD9BC3E5A865-RICHARD, ANN]
Sent: 8/27/2019 3:10:07 PM
To: Williams, Antony [Williams.Antony@epa.gov]
Subject: FW: Development and access to authoritative PFAS Chemicals of Interest list(s)

Hi Tony,

Ex. 5 Deliberative Process (DP)

I know you're busy, but wanted to confer with you, or defer to you, in responding to the below.
No hurry, so we can discuss when you return from ACS.

Hope the talks go well, you get lots of good feedback and energy from the interactions, and you get some sleep!

Safe travels home,
Ann

From: Barrette, Michael <Barrette.Michael@epa.gov>
Sent: Monday, August 26, 2019 4:42 PM
To: Williams, Antony <Williams.Antony@epa.gov>; Richard, Ann <Richard.Ann@epa.gov>; Montilla, Alex <Montilla.Alex@epa.gov>; Buckley, Timothy <Buckley.Timothy@epa.gov>; Scheitlin, Tom <Scheitlin.Tom@epa.gov>
Cc: Pruzinsky, Amanda <Pruzinsky.Amanda@epa.gov>; Andrew Stoeckle <Andrew.Stoeckle@erg.com>; Abby Burton <abby.burton@erg.com>; Pilant, Drew <Pilant.Drew@epa.gov>; Tadesse, Haile <tadesse.haile@epa.gov>
Subject: FW: Development and access to authoritative PFAS Chemicals of Interest list(s)

Hi Antony and Ann,

I know that we haven't yet convened the full PFAS Data Workgroup since our face-to-face meeting – so they may not know of the work that you have planned. The email below reminded me that we did need to tee up the core issues for you. Perhaps this is a starting point and perhaps you could initiate a first discussion with the people that expressed interest in this topic (which I've copied below). Please let me know what questions you may have before plunging into this. Thanks.

Mike

Email Group of those Interested in PFAS chemical list harmonization

Williams, Antony <Williams.Antony@epa.gov>; Libelo, Laurence <Libelo.Laurence@epa.gov>; Lindstrom, Andrew <Lindstrom.Andrew@epa.gov>; Buckley, Timothy <Buckley.Timothy@epa.gov>; Gillespie, Andrew <Gillespie.Andrew@epa.gov>; Vendinello, Lynn <Vendinello.Lynn@epa.gov>; Krasnic, Toni <krasnic.toni@epa.gov>; Born, Tom <Born.Tom@epa.gov>; Harman, John <Harman.John@EPA.GOV>; Andrew Stoeckle <Andrew.Stoeckle@erg.com>; Pruzinsky, Amanda <Pruzinsky.Amanda@epa.gov>; Abby

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Suggested Group Name = PFAS Chemical List Curation Workgroup (Antony will be chair)

From: Abby Burton <Abby.Burton@erg.com>
Sent: Monday, August 26, 2019 4:32 PM
To: Barrette, Michael <Barrette.Michael@epa.gov>
Cc: Pruzinsky, Amanda <Pruzinsky.Amanda@epa.gov>; Yourish, Jesse <yourish.jesse@epa.gov>; Andrew Stoeckle <Andrew.Stoeckle@erg.com>; Matthew Heyward <Matthew.Heyward@erg.com>
Subject: Development and access to authoritative PFAS Chemicals of Interest list(s)

Hi Mike,

We are expecting that until WQP incorporates the SRS-maintained list of PFAS of interest, we would assume that the December tool would follow much the same refresh process as it does now. In thinking about what and when updates to the PFAS chemical list will be needed, we have a few questions for you.

1. Do you have any information on what and when to expect a **definitive list** from Antony Williams's chemical list workgroup? Unless and until the SRS solutions are in place, we will need to apply the PFAS master list to filter on all eligible records for most data systems in the tool. It would be good to have a draft/tentative list by the end of September as input for the beta tool. We would need the final version of the PFAS list by the end of November.

   Here's how our data sources are interacting with the PFAS list.
   - Water Quality Portal – ideally this source will ingest the SRS list as a flag. If this is not achievable in time, filtering will have to be done by retrieving a specified list of PFAS chemicals in our auto-update process. To change our retrieval code, we will need a dump from WQP of all unique chemicals in the system AND the updated PFAS list.
   - DMR Loadings Tool – We understand that the DMR Loadings tool undertook a one-time effort to create a PFAS flag using what had been called the NCCT Master list). If so, the DMR Loadings tool flag may be need to be updated again (as the chemicals of interest may change) in October and very early December so we can retrieve the PFAS loadings.
   - UCMR – no list needed; six PFAS chemicals were tested for and all will be pulled into the tool.
   - CDR – Chemical Workgroup List will be manually applied; this source will not pull in SRS flags and is rarely updated. CDR may be refreshed (and include late filers) before the Tool launch. If new records are included, the PFAS matching will need to be redone.
   - Superfund and Federal Agency Locations – these we developed via a data call that probably did not specify particular PFAS chemicals. If so, no updating is needed.

2. Is there a way we might contribute to the discussion of what chemicals will be considered PFAS (for the purposes of the tool)? Our observations regarding NCCT's development of the Master list and the latest PFAS list based on function are:
   a. The universe of all PFAS chemicals may be broader than the subset of PFAS chemicals that are of interest to EPA (which may change). It would be advantageous to have a single "master" list of all PFAS chemicals that also includes flags for programs' PFAS chemicals of interest.

b. In order to determine what chemicals are PFAS, a standard, structure-based definition is required.

    i. "Per- and poly-fluoroalkyl substances" is inadequately precise; what degree of fluorination is required to be "polyfluorinated"? Does having a per-/poly-fluorinated moiety anywhere in the molecule make the chemical PFAS? For example, some large pharmaceutical and other compounds with a small perfluorinated alkyl moiety are excluded from the structural PFAS list because they do not meet the Fluorine to Carbon ratio (#F/#C) = or > 0.5 requirement. Will these chemicals degrade into PFAS in the environment? If the #F/#C ratio is needed, is 0.5 the correct balance?
    ii. The adjacent CF2 group requirement in the structural list effectively limits linear perfluoroalkyl substances to those with 4 or more carbon atoms. It is not clear from the definition if polyfluorinated chemicals with a CF2H as a terminal carbon have that group counted as a CF2 group; 1,1,2,2,3,3-hexafluoropropane is included on the NCCT structural list, while 1,1,2,2-tetrafluoroethane is not.

c. The universe of PFAS chemicals may contain chemicals that are not of interest to EPA or do not share similar properties to PFAS of concern, even if they meet the definition of PFAS (such as very short-chain PFAS). Can these chemicals be identified by a flag rather than being omitted, leaving the decision to include or exclude them up to the user?
d. The list should be inclusive (i.e., including any chemical that meets the definition of PFAS). **The length of the list is irrelevant.** The list should capture all forms and all chemicals potentially of interest. Users can then filter out chemicals not of interest.

3. If SRS is to be the primary place we and others retrieve the most current PFAS list, it needs to be updated on schedule or by trigger. As of today, they have not posted the recent updates to PFAS Master, which included the structurally defined PFAS chemicals, increasing the Master from 5,061 by 1,000 or so unique chemicals. Andrew has relayed this disconnect to Jon Harman.

Thanks,
Abby
Abby Burton | Eastern Research Group, Inc. | 781.674.7394